



June - November 2020 Atlantic Hurricane Season Outlooks

ACTIVE TO EXTREMELY ACTIVE

Update of 7 August 2020

compiled by CIMH
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2020 Hurricane Season Forecasts

➔ strong consensus: **ACTIVE TO EXTREMELY ACTIVE SEASON**

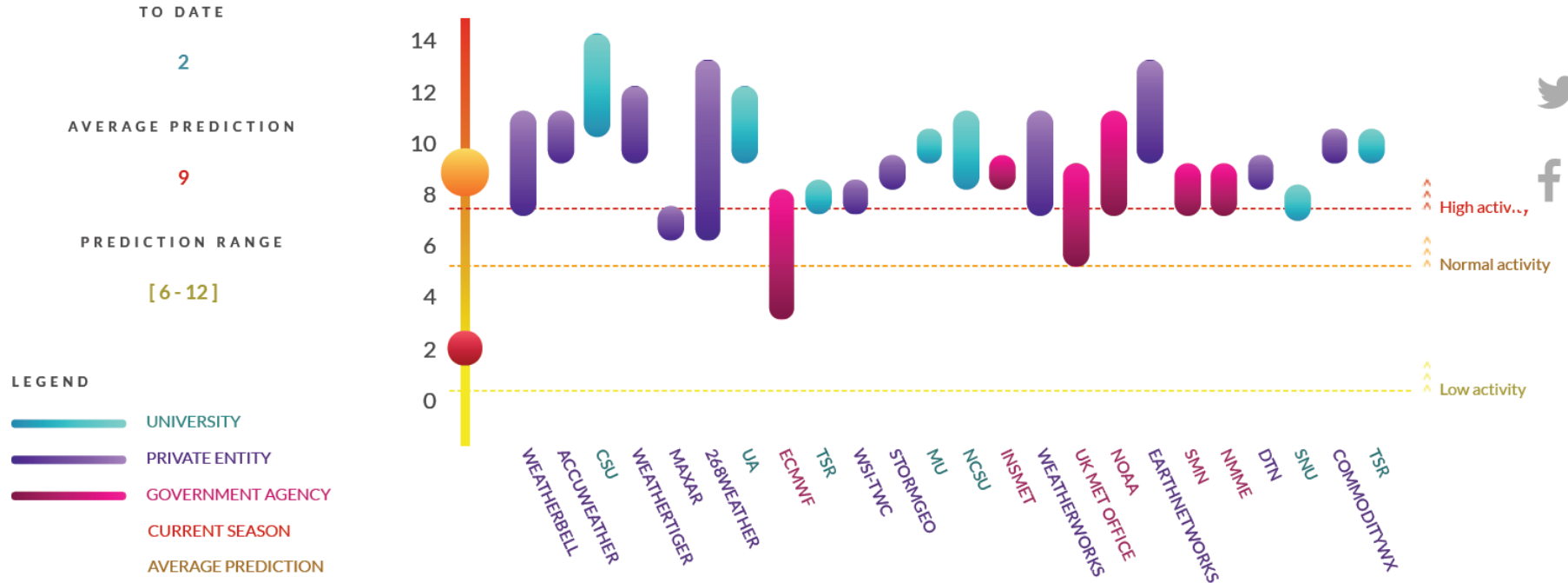
Forecast Parameter and 1981-2010 Climatology (in parentheses)	CSU 5 th August 2020	Tropical Storm Risk 5 th August 2020	Weather Channel 16 th July 2020	NOAA Climate Prediction Center 6 st August 2020 (70% confidence range)
Named Storms (NS) (12)	24	24	20	19-25
Hurricanes (H) (5.9)	12	10	8	7-11
Intense Hurricanes (IH) (2.3)	5	4	4	3-6
Accumulated Cyclone Energy (ACE) (Median = 100)	200	166		140-230

Comparing 2020 CSU Atlantic Hurricane Season outlook to 2017

Forecast Parameter and 1981-2010 Average (in parentheses)	Issue Date 2 April 2020	Issue Date 4 June 2020	Issue Date 7 July 2020	Issue Date 5 August 2020	Observed Thru 4 August 2020	Remainder of Season Forecast
Named Storms (NS) (12.1)	16	19	20	24*	9	15
Named Storm Days (NSD) (59.4)	80	85	85	100	23.75	76.25
Hurricanes (H) (6.4)	8	9	9	12	2	10
Hurricane Days (HD) (24.2)	35	40	40	45	3	42
Major Hurricanes (MH) (2.7)	4	4	4	5	0	5
Major Hurricane Days (MHD) (6.2)	9	9	9	11	0	11
Accumulated Cyclone Energy (ACE) (106)	150	160	160	200	23	177
Net Tropical Cyclone Activity (NTC) (116%)	160	170	170	215	31	184

2017	6 April	Update 1 June	Update 5 July	Update 4 August	Obs.
Hurricanes	4	6	8	8	10
Named Storms	11	14	15	16	17
Hurricane Days	16	25	35	35	51.25
Named Storm Days	50	60	70	70	91.25
Major Hurricanes	2	2	3	3	6
Major Hurricane Days	4	5	7	7	19.25
Accumulated Cyclone Energy	75	100	135	135	226
Net Tropical Cyclone Activity	85	110	140	140	231

Overview of forecasted number of Atlantic Hurricanes in 2020 (as of August 2020)



Caribbean Landfall probabilities

▶ CSU:

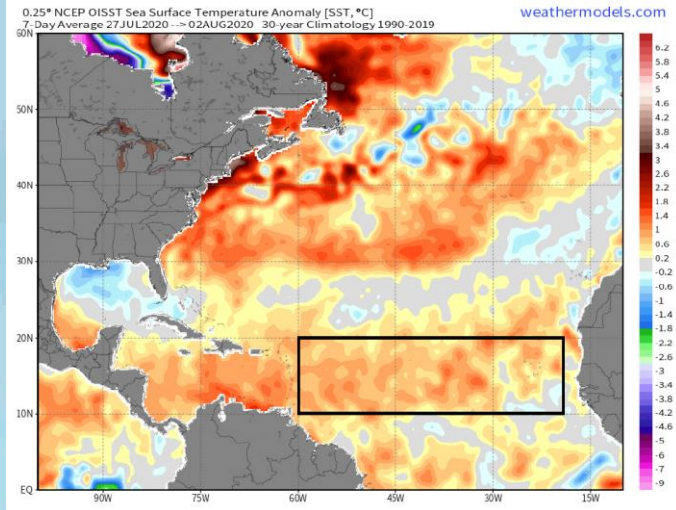
- ▶ 1901-2000 average probability for major hurricanes tracking into the Caribbean (10-20°N, 60-88°W) 42%, for all hurricanes tracking into the Caribbean is 57%.
- ▶ Forecast for 2020:
63% probability for at least one major hurricane (Cat 3, 4 or 5),
92% probability for at least one hurricane (all categories).

▶ TSR:

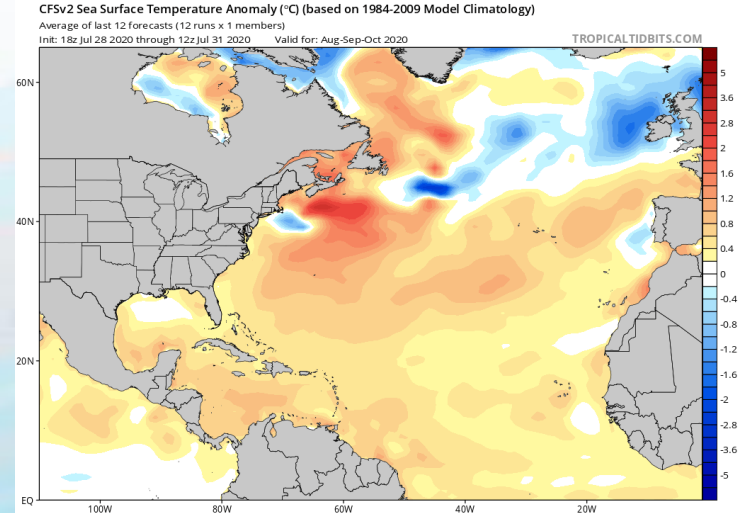
- ▶ 1950-2019 average number of tropical cyclones tracking through the Caribbean Sea and Gulf of Mexico: 8 named storms, 4 hurricanes and 2 major hurricanes
- ▶ Forecast for 2020:
17 named storms, 8 hurricanes and 4 major hurricanes

Unusually Warm sea surface temperatures (SSTs) in the Main Development Region for hurricanes → typical of an active season

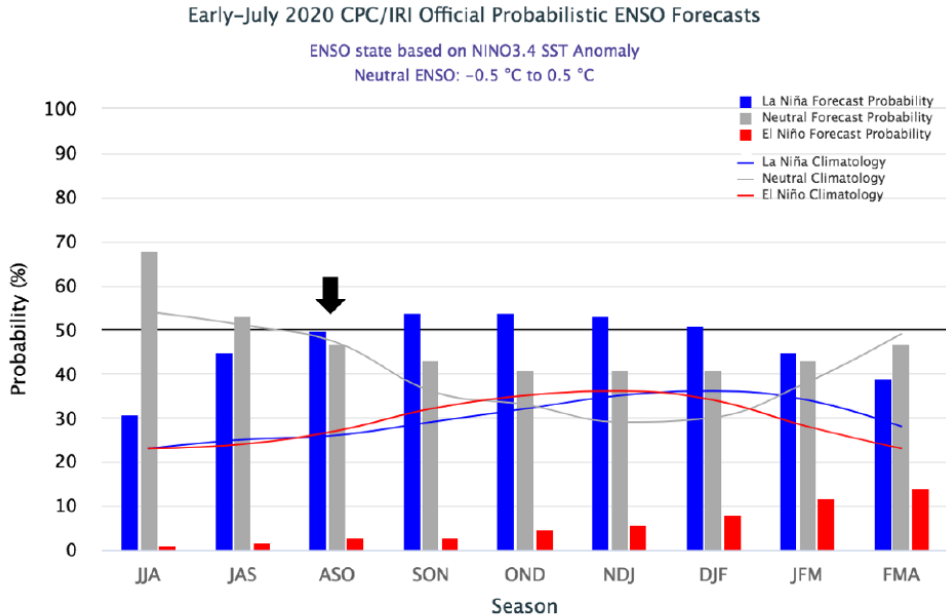
Observations of the latest SST anomalies (source: NOAA/NCEP)



Forecast SST Anomalies for August through October 2020 (source: NOAA/NCEP)



Possible **La Niña** conditions by October might boost Hurricane Season activity



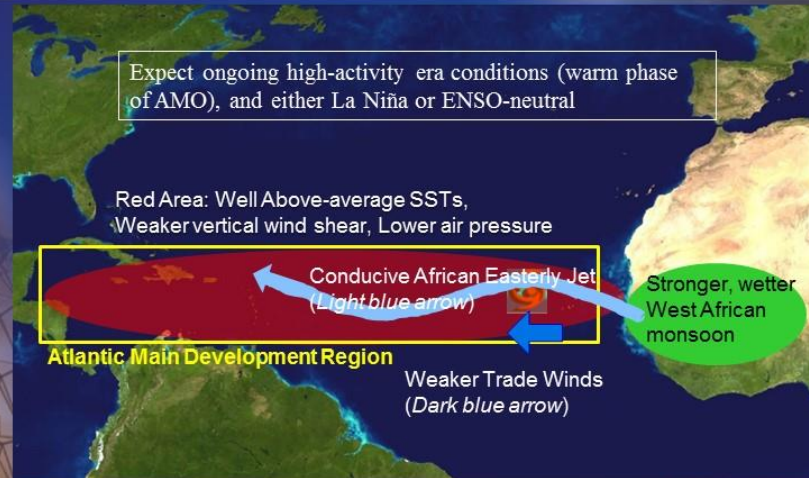
Source: NOAA CPC / IRI – ENSO: Recent Evolution, Current Status and Predictions

NOAA/CPC Outlook – drivers of hurricane season activity in 2020 (simplified)



Very Conducive Conditions Predicted for August–October 2020

1. High-activity era conditions are now very conducive and typify an extremely active season. These include well above-average SSTs in the Main Development Region, along with ...
2. Weaker trade winds, weaker vertical wind shear, and a stronger west African monsoon.
3. Potential La Niña. The combination of a warm AMO and La Niña sets the stage for a potentially extremely active season.





2020 Atlantic Tropical Cyclone Names

~~Arthur~~
~~Bertha~~
~~Cristobal~~
~~Dolly~~
~~Edouard~~
~~Fay~~
~~Gonzalo~~

~~Hanna~~
~~Isaias~~
Josephine
Kyle
Laura
Marco
Nana

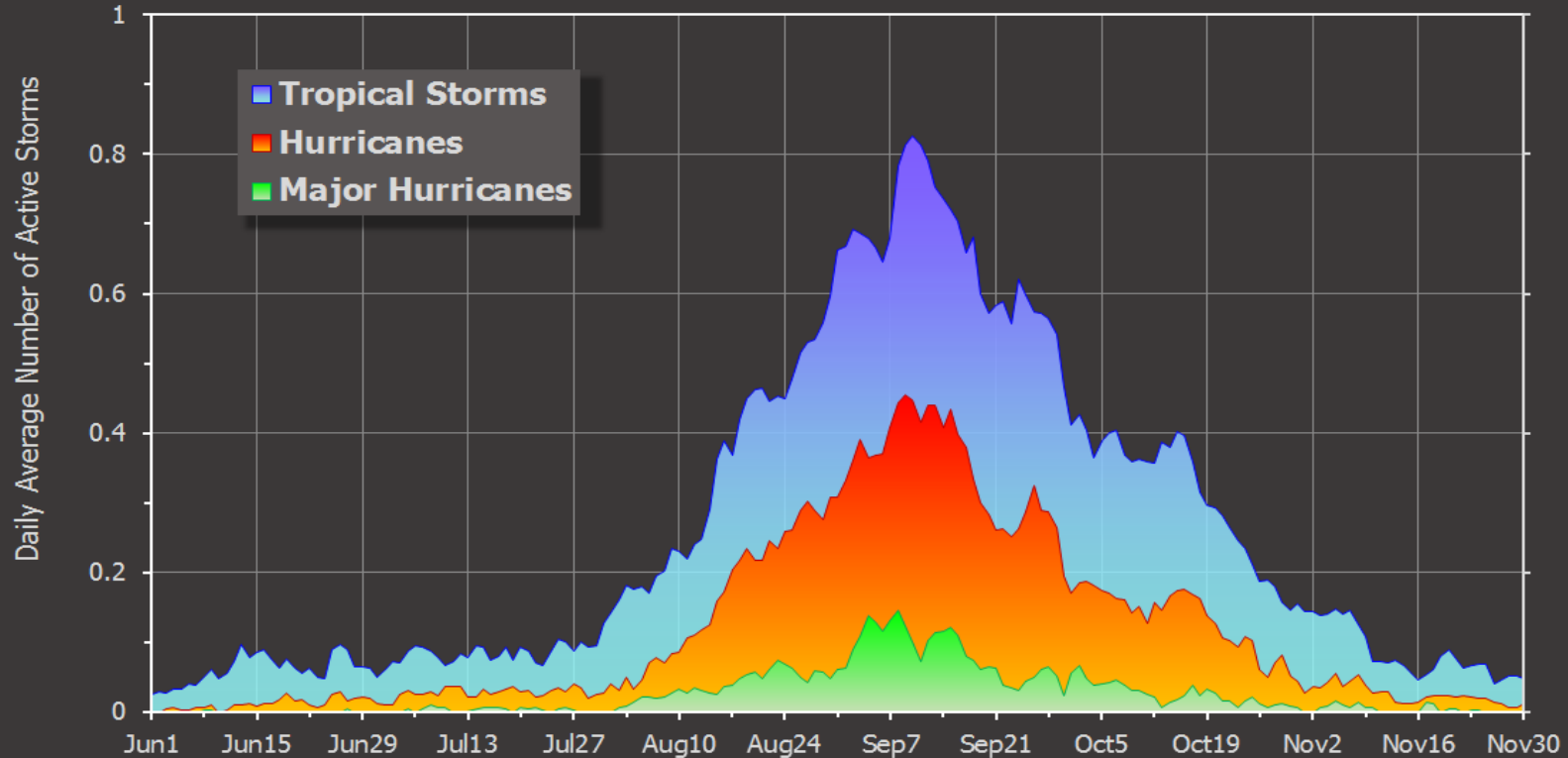
Omar
Paulette
Rene
Sally
Teddy
Vicky
Wilfred

Names provided by the World Meteorological Organization. If there are more than 21 named storms names will be taken from the Greek alphabet.

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter.

August 6, 2020

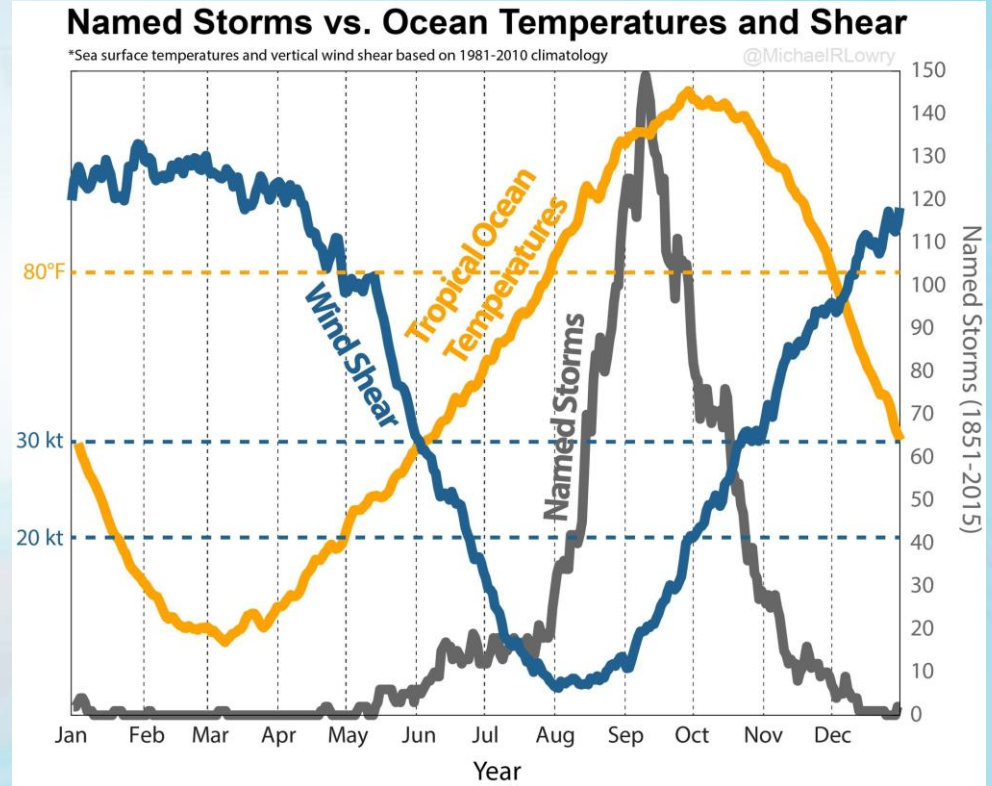
Atlantic Tropical Cyclone Climatology (1851-2013)



Basin-wide TC activity historically **peaks on 10 September**

Could we make useful predictions of parts of the season?

- ▶ The peak of the season is from August to October
➔ what will this period bring?
- ▶ CariCOF predicts 2 three-month periods each month
➔ What could June to August and September to November look like?



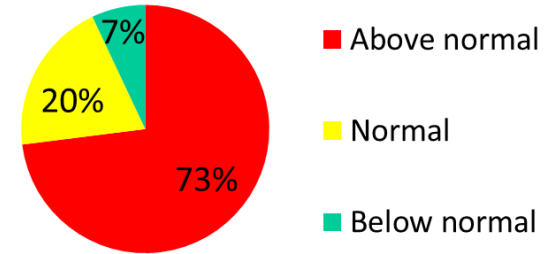


2020 Atlantic Hurricane Season Activity

CIMH Experimental forecasts

Period	1981-2010	Forecast	Range	Confidence level
May 2020 forecasts for the Number of Named Storms				
Entire season	12	17	8-21	High
First half (JJA)	4	6	2-10	Medium
Peak season (ASO)	9.5	13	6-15	Medium
Second half (SON)	7	9	5-12	Medium
August 2020 forecasts for the Number of Named Storms				
Entire season	12	24	17-26	High
ASOND 2020	10	15	8-17	Medium

**Number of Named Storms
(August to December)**



NOTE

- ▶ Authorities and interests are advised to constantly monitor weather advisories issued by the National Meteorological Services.
- ▶ They should also constantly monitor other information provided by the Caribbean Disaster Emergency Management Agency (<http://cdema.org/>) and the US National Hurricane Center (<https://www.nhc.noaa.gov/>).
- ▶ All persons and entities should abide by any official advisories issued by the National Meteorological Service in their country.

DISCLAIMER

- ▶ CIMH is providing special weather interpretation of the current and forecasted tropical weather affecting the Caribbean region.
- ▶ CIMH is not an official forecasting authority.